

a coating on said first surface of said transparent substrate, said coating being adjacent to the recording head, wherein a thickness of said coating is substantially inversely proportional to a refractive index of said coating;

a light source that directs a beam of light through said transparent substrate and said coating and onto the recording head, wherein the beam of light is reflected from the recording head; and,

a photodetector that detects the reflected light beam;

a computer that is coupled to said photodetector and determines a flying height, said coating thickness having a value so that a minimum intensity level of the reflected light beam is at a negative flying height.

23. (New) The tester as recited in Claim 22, wherein said thickness of said coating is further substantially proportional to a wavelength of said light.

24. (New) The tester as recited in Claim 22, wherein said coating is transparent.

25. (New) The tester as recited in Claim 24, wherein said transparent coating has a hardness that is greater than a hardness of said transparent substrate.

26. (New) The tester as recited in Claim 24, wherein said transparent substrate is a glass material and said transparent coating is a diamond-like-carbon material.

27. (New) The tester as recited in Claim 26, wherein said diamond-like-carbon material is hydrogenated.

28. (New) The tester as recited in Claim 26, wherein said diamond-like-carbon material is nitrogenated.